



OWNER'S MANUAL AND COOKING GUIDE

MODEL : MO-7558B

**0.7 CUBIC FOOT
QUICK & EASY TOUCH
MICROWAVE OVEN
WITH
TURNTABLE**

Before operating your oven, please read these instruction completely.

PRECAUTION TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY

- (a) Do not attempt to operate this oven with the door open since open-door operation can result in harmful exposure to microwave energy. It is important not to defeat or tamper with the safety interlocks.
- (b) Do not place any object between the oven front face and the door or allow soil or cleaner residue to accumulate on sealing surfaces.
- (c) Do not operate the oven if it is damaged.
It is particularly important that the oven door close properly and that there is no damage to the:
(1) Door (bent), (2) hinges and latches (broken or loosened), (3) door seals and sealing surfaces.
- (d) The oven should not be adjusted or repaired by anyone except properly qualified service personnel.

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SPECIFICATIONS

Model number	: MO-7558B
Input Power	: 1250 WATT
Output Power	: 800 watt
Cavity Dimensions	: 304(W) × 192(H) × 318(D)mm
Outer Dimensions	: 460(W) × 265(H) × 322(D)mm
Oven Capacity	: 0.7cu-ft
Microwave Frequency	: 2,450MHz

IMPORTANT SAFETY INSTRUCTIONS

When using electrical appliances, basic safety precautions should be followed, including the following:

WARNING: - To reduce the risk of burns, electric shock, fire, injury to persons or exposure to excessive microwave energy:

- 1** Read all instructions before using this appliance.
- 2** Read and follow the specific **"PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY"** found on page 1.
- 3** This appliance must be grounded. Connect only to a properly grounded outlet. See **"GROUNDING INSTRUCTIONS"** found on page 4.
- 4** Install or locate this appliance only in accordance with the provided installation instructions.
- 5** Some products such as whole eggs and sealed containers-for example, closed glass jars - may explode and should not be heated in this oven.
- 6** Use this appliance only for its intended use as described in this manual.
- 7** As with any appliance, close supervision is necessary when used by children.
- 8** Do not operate this appliance if it has a damaged cord or plug, if it is not working properly, or if it has been damaged or dropped.
- 9** This appliance should be serviced only by qualified service personnel. Contact the nearest authorized service facility for examination, repair or adjustment.
- 10** Do not cover or block any openings on this appliance.
- 11** Do not use outdoors.
- 12** Do not immerse cord or plug in water.
- 13** Keep cord away from heated surfaces. Do not immerse cord or plug in water.
- 14** Do not let cord hang over edge of table or counter.
- 15** When cleaning surfaces of door and oven that come together when closing the door, use only mild, non-abrasive soaps or detergents applied with a sponge or soft cloth.
- 16** To reduce the risk of fire in the oven cavity:
 - (a) Do not overcook food. Carefully attend appliance if paper, plastic, or other combustible materials are placed inside the oven to facilitate cooking.
 - (b) Remove wire twist-ties from paper or plastic bags before placing bag in oven.
 - (c) If materials inside the oven should ignite, keep oven door closed, turn oven off, and disconnect the power cord, or shut off power at the fuse or circuit breaker panel.
- 17** Do not use this microwave oven to heat corrosive chemicals (for example, sulfides and chlorides). Vapors from such corrosive chemicals may interact with the contact and springs of the safety interlock switches thereby rendering them inoperable.

SAVE THESE INSTRUCTIONS

SAFETY PRECAUTIONS

General Use

- 1** Do NOT attempt to tamper with or make any adjustments or repairs to door, control panel or any other part of the oven. Do NOT remove outer panel from oven. Repairs should only be done by qualified service personnel.
- 2** Do NOT operate the oven empty. The microwave energy will reflect continuously throughout the oven if no food or water is present to absorb energy.
- 3** If a fire occurs in the oven, touch the STOP/CLEAR pad and LEAVE THE DOOR CLOSED. Disconnect the power cord, or shut off power at the fuse or circuit breaker panel.
- 4** Do NOT attempt to dry clothes, newspapers or other materials in the oven. They may catch on fire.
- 5** Do NOT use recycled paper products, as they may contain impurities which may cause sparks and/or fires when used.
- 6** Do NOT hit or strike control panel. Damage to controls may occur.
- 7** Avoid inserting nails, wire, etc. through any holes in the unit during operation. Never insert a wire, nail or any other metal objects through the holes on the cavity or any other holes or gaps, because such objects may cause electric shock and microwave leakage.

Utensils

- 1** METAL CONTAINERS or dishes with metallic rims should not be used. Arcing may occur.
- 2** METAL TWIST-TIES may not be used in the microwave oven.
- 3** Do NOT use SEALED JARS or NARROW NECK bottles for cooking or reheating. They may shatter.
- 4** Do NOT use CONVENTIONAL THERMOMETERS in the microwave oven. They may cause arcing.
- 5** Remove PLASTIC STORE WRAPS before cooking or defrosting foods in the oven.

- 6** For FURTHER INFORMATION on proper cooking utensils, refer to the microwave cooking guide.

Food

- 1** Never use your microwave oven for HOME CANNING. The oven is not designed to permit proper canning. Improperly canned food may spoil and be dangerous to consume.
- 2** COOKING TIMES given in the cooking guide are approximate. Factors that may affect cooking are starting temperature, altitude, volume, size and shape of food and utensils used. As you become familiar with the oven, you will be able to adjust for these factors.
- 3** It is better to UNDERCOOK RATHER THAN OVERCOOK foods. If food is undercooked, it can always be returned to the oven for further cooking. If food is overcooked, nothing can be done. Always start with minimum cooking times.
- 4** SMALL QUANTITIES of food or foods with LOW MOISTURE content can burn, dry out or catch on fire if cooked too long.
- 5** Do NOT boil eggs in their shell. Pressure may build up and the eggs will explode.
- 6** Potatoes, apples, egg yolks, whole acorn squash and sausage are examples of food with NONPOROUS SKINS. These must be pierced before cooking to prevent bursting.
- 7** POPCORN must be popped in a microwave corn popper. Microwave popped corn produces a lower yield than conventional popping. Do not use oven for popcorn unless popped in a microwave approved popcorn utensil or unless it's commercially packaged and recommended especially for microwave ovens. Do not use oil unless specified by the manufacturer.
- 8** Do NOT attempt to deep fat fry in your oven.
- 9** HEATED LIQUIDS can ERUPT if not mixed with air. Do not heat liquids in your microwave oven without first stirring.

GROUNDING INSTRUCTIONS

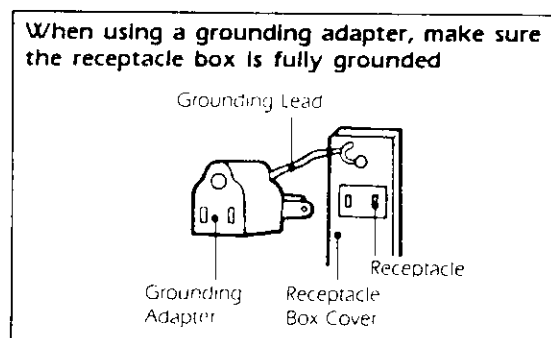
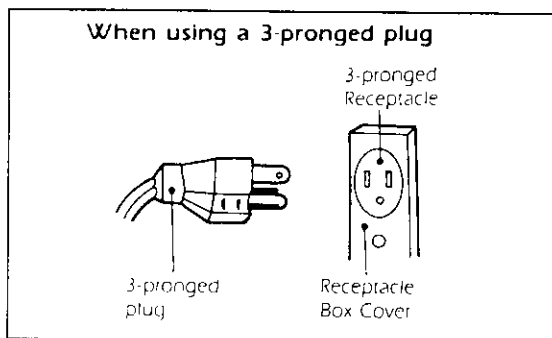
This appliance must be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This appliance is equipped with a cord having a grounding wire with a grounding plug. The plug must be inserted into an outlet that is properly installed and grounded.

WARNING: Improper use of the grounding plug can result in a risk of electric shock. Consult a qualified electrician or service person if the grounding instructions are not completely understood, or if doubt exists as to whether the appliance is properly grounded.

If it is necessary to use an extension cord, use only a three wire extension cord that has a three blade grounding plug, and a three slot receptacle that will accept the plug on the appliance. The marked rating of the extension cord should be equal to or greater than the electrical rating of the appliance.

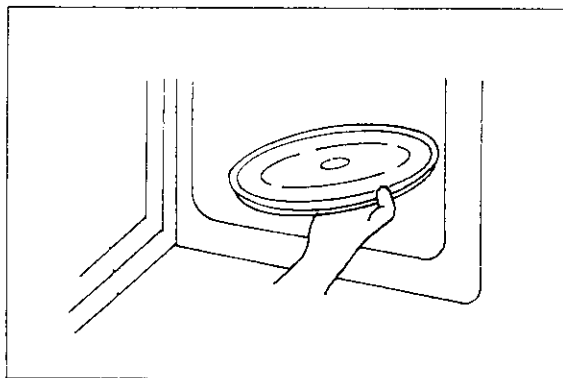
INSTALLATION

1. **Steady, flat location:** When positioning the microwave oven, it should be set on a flat, steady surface.
2. **Ventilation:** Do not block air vents. If they are blocked during operation, the oven may overheat and eventually cause oven failure. For proper ventilation, keep 3 inches of space between the oven's top, sides, rear and the area where the unit is to be installed.
3. **Radio and TV reception:** Poor television reception and radio interference may result if the oven is located close to a TV, radio, antenna, or antenna wire. Position the oven as far from them as possible.
4. **Temperature and moisture:** Keep the oven away from hot air, steam or splashing liquids when choosing a place to locate it, otherwise, the unit's operation may be adversely affected, causing it to break down.
5. **Power supply:**
 - Check your local power source.
 - Use a receptacle that will accept the ground prong.
 - Power supply cord is 1.4 meters (4.5 feet) long.
 - 1. A short power supply cord is provided to reduce the risks resulting from becoming entangled in or tripping over a longer cord.
 - 2. Longer cord sets or extension cords are available and may be used if care is exercised in their use.
 - 3. If a long cord or extension cord is used, (1) the marked electrical rating of the cord set or extension cord should be at least as great as the electrical rating of the appliance, (2) the extension cord must be a grounding-type 3-wire cord, and (3) the longer cord should be arranged so that it will not drape over the counter top or tabletop where it can be pulled on by children or tripped over accidentally.
6. **Examine the oven for any damage such as:** Dents, a misaligned door, broken door or a dent in the cavity. If any of the above are visible, DO NOT INSTALL THE UNIT. NOTIFY THE DEALER IMMEDIATELY.



CARE OF YOUR MICROWAVE OVEN

- 1 Disconnect the AC plug from the outlet before cleaning.
- 2 Keep the inside of the oven clean. When food spatters or spilled liquids adhere to oven walls, wipe with a damp cloth. Mild detergent may be used if the oven gets very dirty. The use of harsh detergent or abrasives is not recommended.
- 3 The outside oven surface should be cleaned with soap and water, rinsed and dried with a soft cloth. To prevent damage to the operating parts inside the oven, water should not be allowed to seep into the ventilation slots.
- 4 If the Control Panel becomes wet, clean with a soft, dry cloth. Do not use harsh detergents or abrasives on Control Panel.
- 5 If steam accumulates on both sides of the oven door, wipe with a soft cloth. This may occur when the microwave oven is operated under high humidity conditions and this is not an indication of a malfunction in the unit.
- 6 It is occasionally necessary to remove the glass tray for cleaning. Wash the tray in warm, sudsy water or in a dishwasher.
- 7 The roller guide and oven cavity floor should be cleaned regularly to avoid excessive noise. Simply wipe the bottom surface of the oven with mild detergent water or window cleaner and dry. The roller guide may be washed in mild, sudsy water or dishwasher.

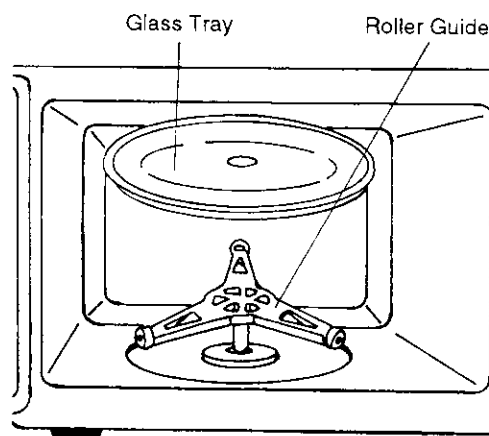


Roller Guide

- 1 The ROLLER GUIDE and oven floor should be cleaned frequently to prevent excessive noise.
- 2 The ROLLER GUIDE MUST ALWAYS be used for cooking together with the Glass Tray.

Glass Tray

- 1 Do NOT operate the oven without the Glass Tray in place.
- 2 Do NOT use any other Glass Tray with this oven.
- 3 If the Glass Tray is hot, ALLOW IT TO COOL before cleaning it or placing in in water.
- 4 Do NOT cook directly on the Glass Tray.

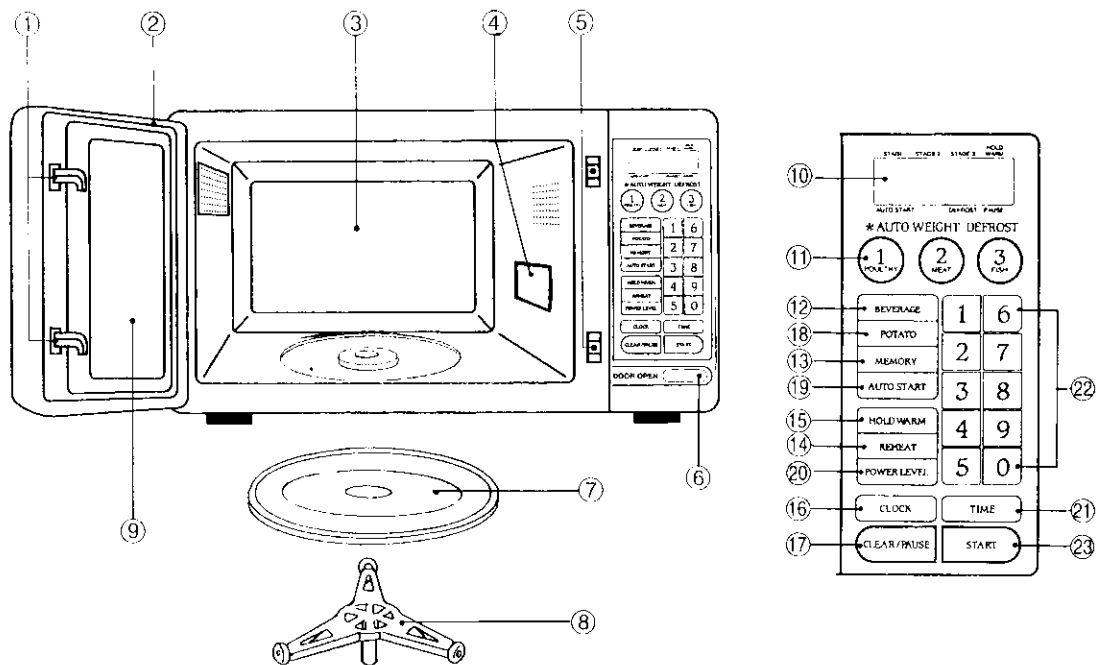


HOW TO USE YOUR MICROWAVE OVEN SAFELY

Although your oven is provided with safety features, it is important to observe the following:

- a) It is important not to defeat or tamper with safety interlocks.
- b) Do not place any object between the oven face and the door or allow residue to accumulate on sealing surfaces. Wipe the sealing area frequently with a mild detergent, rinse and wipe dry. Never use abrasive powders or pads.
- c) When opened, the door must not be subjected to strain, for example, a child hanging on an open door or any load which could cause the oven to fall forward and cause injury and damage the door. Do not operate the oven if it is damaged, until it has been repaired by a qualified person. It is particularly important that the oven door close properly and that there is no damage to the:
 - i) Door (bent), ii) Hinges and Latches (broken or loosened), iii) Door seals and sealing surfaces.
- d) The oven should not be adjusted or repaired by anyone except properly qualified service personnel

FEATURE LOCATIONS



- ① **Door latch** – When the door is closed, it will automatically lock shut, if the door is opened while the oven is operating, the magnetron will automatically shut off.
- ② **Door seal** – The door seal maintains the microwaves within the oven cavity and prevents microwave leakage.
- ③ **Oven cavity.**
- ④ **Spatter shield** – Protects the microwave outlet from splashes of cooking foods.
- ⑤ **Safety interlock system** – Prevents the oven from operating while the door is opened.
- ⑥ **Door release button** – Pushing this button stops oven operation and opens the door.
- ⑦ **Glass cooking tray** – Made of special heat resistant glass. The tray must always be in proper position before operating the oven. Do not cook food directly on the tray.
- ⑧ **Roller guide** – Support the glass cooking tray.
- ⑨ **Door screen** – Allows viewing of food. The screen is designed so that light can pass through, but not the microwaves.

- ⑩ **LED display** – Cooking time, power level, indicators and the present time are displayed.
- ⑪ **Auto weight defrost pad** – Used to set the desired defrosting weight from 0.1kg to 3kg.
- ⑫ **Beverage pad** – Used to reheat beverage.
- ⑬ **Memory pad** – Touch to program or recall any desired memory setting.
- ⑭ **Reheat pad** – Touch to set any desired reheat setting.
- ⑮ **Hold warm pad** – Used to keep the food warm after cooking is completed.
- ⑯ **Clock pad** – Touch to set the present time.
- ⑰ **Clear / Pause** – Used to stop oven operation or to delete the cooking data.
- ⑱ **Potato pad** – Touch to cook potatoes.
- ⑲ **Auto start pad** – Touch this pad to auto start the oven.
- ⑳ **Power level pad** – Used to set the desired cooking power level setting.
- ㉑ **Time pad** – Touch to set any desired cook setting.
- ㉒ **10 key pads** – Used to select the desired power level, cooking time, etc.
- ㉓ **Start pad** – Used to start a selected operation.

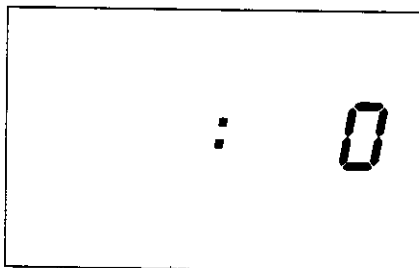
CONTROLS

SETTING THE CLOCK

When the oven is first plugged in, the display will flash "0:00" and a tone will sound. If the AC power ever goes off, the display will flash "0:00" when the power comes back on.

CLEAR/PAUSE

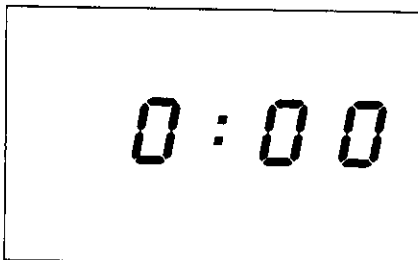
1. Touch the **CLEAR/PAUSE** pad.



The display will show "0".

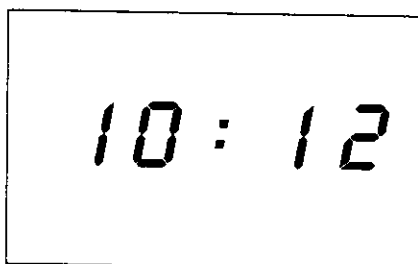
CLOCK

2. Touch the **CLOCK** pad.



The display will flash "0:00" and a tone will sound.

3. Enter the correct time of day.

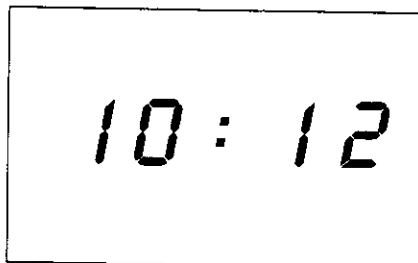


EXAMPLE: To set the time to "10:12", touch "1", "0", "1", "2" in sequence.

The display will show the numbers pressed in the order you pressed them.

CLOCK

4. Touch the **CLOCK** pad.



The display will show the present time and the colon will stop blinking. This 12 hour digital clock allows you to set it from "1:00" to "12:59".

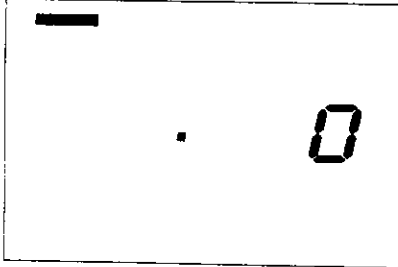
NOTE: If the oven is used before the present time is set, the display will show "0" after the cooking is completed, and the door is opened.
To reset present time in the display window when the oven is off, touch the **CLOCK** pad. The colon starts blinking. Enter the correct present time by following the above procedures.

TIME COOKING

Use the 10 key pads (number pads) to select a cooking or other operational time.

TIME

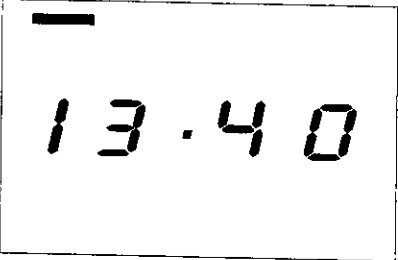
STAGE 1 STAGE 2 STAGE 3



1. Touch the **TIME** pad.

The display will show "0".

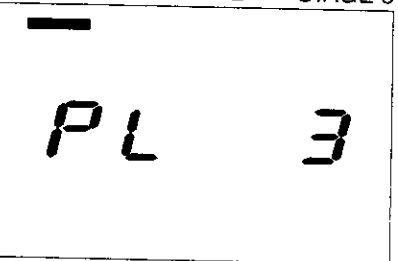
STAGE 1 STAGE 2 STAGE 3



2. Enter a cooking time.

EXAMPLE: To set the cooking time to "13.40" touch "1", "3", "4", "0" in sequence.

STAGE 1 STAGE 2 STAGE 3

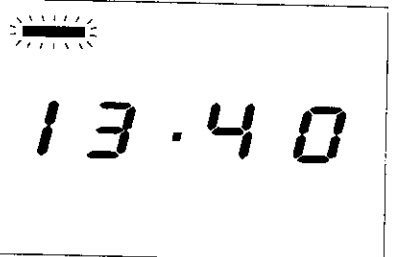


3. Enter **POWER LEVEL**

EXAMPLE: To select 30% power level, touch "POWER LEVEL" and "3". The display will show "PL3"

START

STAGE 1 STAGE 2 STAGE 3



4. Touch the **START** pad.

When you touch START, the stage1 indicator blinks, the display counts down in minutes and seconds and beeps 5 times when cooking is completed.

NOTE: Enter a power level using pads numbered from "1" to "9". Note that touching pad "1" will produce 10 percent power level, pad "2" will produce a 20 percent power level, etc., through pad "9" which is 90 percent power. IF THE SELECTION OF POWER LEVEL IS OMITTED THE OVEN WILL AUTOMATICALLY COOK AT 100 PERCENT OR FULL POWER. If you are using Stage cooking you may select power levels for each cooking stage.

2 STAGE OR 3 STAGE TIME COOKING.

For two or three stage cooking, repeat above steps 1 through 3 before pressing START pad for every additional "time" and "power" program you want to add. Auto Weight Defrost and two stage cooking can be combined if the Auto Weight Defrost is programmed in stage 1.

POTATOES

Put 1-3 potatoes in the oven and close the door.

POTATO

1. Touch **POTATO** once for each potato.

PO 1

When you touch the POTATO pad, the Display will show "PO 1".

START

2. Touch **START**.

3.45

When you touch START, the Display counts down the cooking time in minutes and seconds and beeps 5 times when cooking is completed.

1 POTATO	2 POTATOES	3 POTATOES
3.45	6.30	8.15

BEVERAGES

Put 1-3 mugs of your favorite beverage in the oven and close the door.

BEVERAGE

1. Touch **BEVERAGE** once for each mug.

CUP 1

When you touch the BEVERAGE pad, the Display will show "CUP 1".

START

2. Touch **START**.

1.55

When you touch START, the Display counts down the cooking time in minutes and seconds and beeps 5 times when cooking is completed.

1 MUG	2 MUGS	3 MUGS
1.55	3.30	5.20

AUTO START

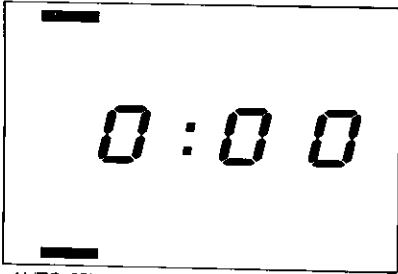
Allows you to program cooking to start at a time you select (up to 11 hours and 59 minutes ahead of the present time). The food will automatically start cooking at the desired time.

1. Program the desired power level and cooking time as previously instructed.

AUTO
START

2. Touch the **AUTO START** pad.

STAGE 1

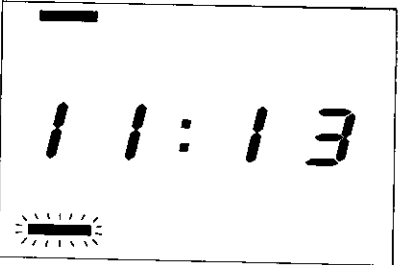


AUTO START

The auto start indicator and the colon will light.

3. Enter the **START** time.

STAGE 1



AUTO START

EXAMPLE: To set the auto start time to "11:13":

1 1 1 3

The display will show the numbers you pressed in the order you pressed them.

START

4. Touch the **START** pad.

When you touch the START pad, the present time will appear in the display window and the cooking program indicators (showing the power level previously selected) come on. The AUTO START indicator and the colon start blinking. When the selected Auto Start Time arrives, the oven begins operating and the oven light turns on. The AUTO START indicator goes off and the next stage indicator begins to blink. When the cooking is completed, you will hear 5 beeps. The oven turns off and the present time appears in the display window.

NOTE: If the oven door is opened before the Auto Start time, press the START pad again after closing the door so that the oven will start at the programmed time. When using the Auto Start feature, some foods may begin to spoil if left at room temperature too long.

REHEAT

Use the Reheat feature to reheat foods in 1 to 5 minutes.

REHEAT

1. Touch the **REHEAT** pad for each minute of reheat time desired (up to 5 minutes).

3.00

EXAMPLE: To select 3 minutes.

- Touch the REHEAT pad 3 times. "3.00" will be displayed.

2. Touch the **START** pad.

The oven will start cooking. The display counts down the cooking time entered in step 1. When cooking is completed, the oven will beep 5 times.

HOLD WARM

The Hold Warm feature can be used to keep food warm after the cooking is completed.

1. Program the desired power level and cooking time as previously instructed.

STAGE 1

25.10

EXAMPLE: Set the cooking time for "25.10"

HOLD WARM

2. Touch the **HOLD WARM** pad for every 10 minutes of Hold Warm time desired (up to 30 minutes).

STAGE 1

HOLD WARM

20.00

EXAMPLE: To select 20 minutes.

- Touch the HOLD WARM pad 2 times. The HOLD WARM indicator will light and "20.00" is displayed.

START

3. Touch the **START** pad. The oven will begin cooking as programmed in step 1.

When the cooking is completed, the oven begins the Hold Warm mode as programmed in step 2.

STAGE 1

HOLD WARM

25.10

EXAMPLE: The STAGE 1 and HOLD WARM indicators will light. The STAGE 1 indicator will start blinking to show you that the oven is cooking. The display counts down the remaining cooking time.

HOLD WARM

20.00

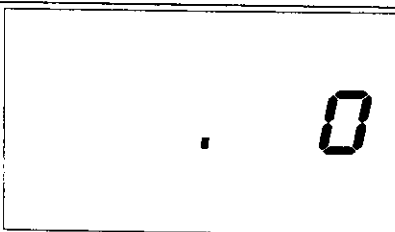
When cooking is completed, the STAGE 1 indicator goes off and the HOLD WARM indicator will start blinking. The display counts down the remaining Hold Warm time. When Hold Warm ends, you will hear 5 beeps.

MEMORY PROGRAMMING

This oven can program a special cooking time. Enter the cooking instructions as shown below. Press the **MEMORY** pad to store the cooking time into memory.

MEMORY

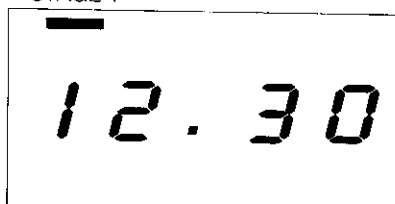
1. Touch the **MEMORY** pad.



When you touch the **MEMORY** pad, ". 0" is displayed if the oven has never been **MEMORY** programmed. If you are changing to a new **MEMORY** program, the previous cooking time will be displayed.

STAGE 1

2. Enter the desired cooking time.



EXAMPLE: Cook for 12 minutes and 30 seconds.

TIME

1 2 3 0

MEMORY

3. Touch the **MEMORY** pad again.

When you touch the **MEMORY** pad, the present time returns in the display window.

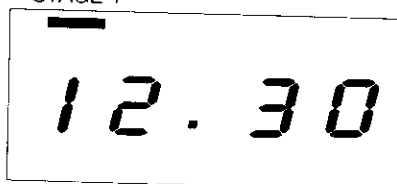
NOTE: If the **START** pad is touched before touching the **MEMORY** pad a second time to enter the program, the oven will cook with the displayed cooking time, but will not retain it in **MEMORY**.

MEMORY COOKING

1. Touch the **Memory** pad to recall memory data (see preceding section).

MEMORY

STAGE 1



EXAMPLE: Touch the **MEMORY** pad; the and cooking time will be displayed.

START

2. Touch the **START** pad.

EXAMPLE: When you touch the **START** pad, the **COOK** Indicator will start to blink. The display counts down the remaining cooking time. When cooking time ends, you will hear 5 beeps.

TO RECALL MEMORY DATA

1. Touch the **Memory** pad to recall memory data.

The programmed cooking time will be displayed.

2. Touch the **CLEAR/PAUSE** pad. The **MEMORY** cooking time displayed will disappear; it will not be erased.

NOTE: Memory program is erased when a new program is entered.

TO STOP THE OVEN WHILE IT IS OPERATING

- PRESS THE CLEAR/PAUSE PAD.
 - The pause indicator will start blinking.
 - You can restart the oven by touching the start pad.
 - Touch the clear/pause pad once more to erase all instructions except for memory data.
 - You must enter in new instructions.
- OPEN THE DOOR
 - You can restart the oven by closing the door and touching the start pad.

NOTE: The oven will stop operating when the oven door is opened.



CHILD LOCK

The child lock prevents unwanted oven operation such as by small children. The oven can be set so that the control panel is deactivated or locked.

TO SET CHILD LOCK

- Touch the "0" pad. 
- Touch the **START** pad five times.  × 5 Times
- Then, the display will show: 

TO CANCEL THE CHILD LOCK

- Touch the "0" pad. 
- Touch the **START** pad five times.  × 5 Times
- Then, the display will return to the present time.

AUTO WEIGHT DEFROST

AUTO WEIGHT DEFROST lets you easily defrost foods by eliminating guesswork in determining defrosting time. The minimum weight for Auto Weight defrost is 0.1 kg. The maximum weight depends on the food category. Up to 3.0kg for poultry, 2.0kg for meat and 2.0kg for fish. Follow the steps below for easy defrosting.

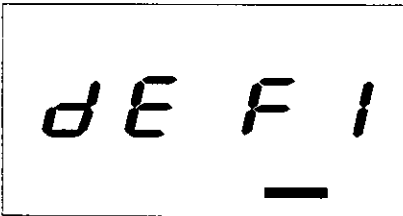
AUTO WEIGHT DEFROST

1
POULTRY

2
MEAT

3
FISH

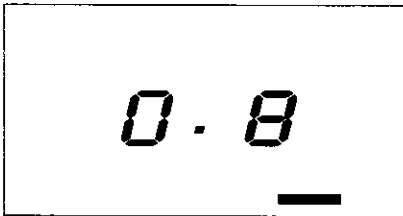
1. Enter the desired auto weight defrost category.



DEFROST


EXAMPLE: To select POULTRY, touch "1", the display will show "dEF 1", and the defrost indicator will light.

2. Enter the food weight.

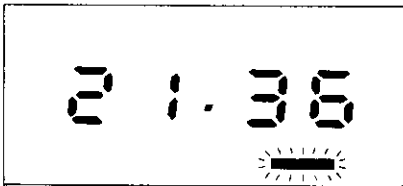


DEFROST

EXAMPLE: To select 0.8 kg., touch "8".



3. Touch the **START** pad.



DEFROST

When you touch START, the defrost indicator blinks, the display counts down in minutes and seconds and beeps 5 times when defrosting is completed

COOKING GUIDE

THE PRINCIPLES OF MICROWAVE COOKING

Microwaves are a form of high frequency radio waves similar to those used by a radio including AM, FM and CB. Electricity is converted into microwave energy by the magnetron tube. From the magnetron tube, microwave energy is transmitted to the oven where it is reflected, transmitted, and absorbed by the food.

Reflection

Microwaves are reflected by metal just as a ball is bounced off a wall. For this reason, metal utensils are not suitable for use in the microwave. A combination of stationary (interior walls) and rotating components (turntable or stirrer fan) helps assure that the microwaves are well distributed within the oven cavity to produce even cooking.

Transmission

Microwaves pass through some materials such as paper, glass and plastic much like sunlight shining through a window.

Because these substances do not absorb or reflect the microwave energy, they are ideal materials for microwave oven cooking containers.

Absorption

During cooking, microwaves will be absorbed by food. They penetrate to a depth of about $\frac{3}{4}$ to $1\frac{1}{2}$ -inches (1.8 to 3.7-cm). Microwave energy activates the molecules in the food (especially water, fat and sugar), and heat is produced. If you vigorously rub your hands together, you will feel heat produced by friction. The internal cooking of larger foods is done by conduction as the heat which is produced by friction is conducted to the middle of the food. Foods also continue to cook by conduction during standing time.

FOOD CHARACTERISTICS

Quantity: The amount of food placed in a microwave oven has a direct effect on the cooking time. Small amounts of food or liquid require less cooking time than larger amounts of the same substance. As quantity increases, concentration decreases.

Size: Small pieces cook faster than large ones. To speed cooking, cut pieces smaller than 2-inches (5-cm), so microwaves can penetrate to the middle from all sides. Pieces which are similar in size and shape cook more evenly.

Shape: Many foods are uneven, like a chicken, ribs or broccoli. The thin parts will cook faster than the thick parts while uniformly thick foods cook evenly. To compensate for irregular shapes, place thin pieces toward the center of the dish and thicker pieces toward the edge of the dish.

Starting Temperature: Frozen or refrigerated foods take longer to cook than foods at room temperature.

Bone and Fat: Because bones conduct heat, the side of meat the bone is on will cook first, while boneless cuts cook slower but more evenly. Fat attracts microwaves. The middle of these foods are cooked by heat conduction.

Moisture Content: Microwaves are attracted by moisture. Naturally moist foods absorb microwaves better than dry ones. Add a minimum of liquid to moist foods, as excess water slows cooking.

Density: The density of food determines how easily the microwaves can penetrate and how quickly it will cook. Porous foods, like chopped beef or mashed potatoes, microwave faster than dense ones like steak or whole potatoes.

Piercing: Steam builds up pressure in foods which are tightly covered by a skin or membrane. Pierce potatoes, egg yolks and chicken livers to prevent bursting.

MICROWAVE TECHNIQUES

Stirring: Stir foods from outside to center of dish once or twice during cooking to equalize heat and speed microwaving. Foods will not burn or stick, so there's no need to stir constantly as you do in conventional cooking.

Arrangement: Arrange foods with thin or delicate ends, like drumsticks or asparagus spears with the thick or tougher portions to the outside of the dish. The parts which need more cooking will receive more energy, so food will microwave evenly.

Spacing: Individual foods, such as baked potatoes and cupcakes will cook more evenly if placed in the oven an equal distance apart. When possible, arrange foods in a circular pattern. Similarly, when placing foods in a baking dish, arrange around the outside of dish, not lined up next to each other. Foods should not be stacked on top of each other.

Rearrangement: Rearrange overlapping areas, like tails of long fish fillets, from top to bottom, and closely packed pieces, like meatballs, from the outside to the center of the dish.

Standing Time: Standing time is especially important in microwave cooking. Microwave energy creates heat in the outer layers of the food. As a result of normal conduction, the food continues to cook for a few minutes after removal from the oven. Letting roasts, large whole vegetables, casseroles and cakes stand to finish cooking, allows the middles to cook completely without overcooking, drying or toughening the outsides.

Covering: Covering speeds cooking time, retains moisture, tenderizes, insures even cooking and prevents spattering. Casserole lids or plastic wrap are used for a tighter seal. Vent plastic by turning back one edge at the side of dish to form a narrow slot where excess steam can escape. Various degrees of moisture retention are also obtained by using wax paper or paper towels.

Browning: Microwave energy cooks some foods so quickly that the fats and sugars within the food do not have time to caramelize and give a "browned" appearance. Browning agents do not affect the quality of microwaved foods, but can add color and flavor. For meats and poultry, use bouquet sauce diluted with water or melted butter; soy, Worcestershire, barbecue or steak sauce; a sprinkling of paprika or dry gravy mix; jelly glaze or crumb coating. Frosting and topping finish cakes and breads. Top casseroles at the end of microwaving with grated cheese or crumbs.

Some Foods do not Microwave Well

Eggs In Shells and shelled boiled eggs can burst.

Pancakes do not crust, but they reheat well. Fully-prepared, frozen pancakes are available for microwaving.

Deep Fat Frying can cause burns.

Bottles with narrow necks may shatter if heated.

Pop popcorn only in special microwave poppers. Do not use oil unless specified by the manufacturer, or heat longer than recommended. Never pop popcorn in paper bags or glass utensils.

REHEATING

One of the major bonuses of the microwave cooking method is its efficiency in reheating cooked food. Most foods can be reheated in the microwave oven without loss of quality or texture. Leftovers taste as good as when freshly prepared, and it is no longer necessary to keep foods hot until everyone is ready to eat.

Main dishes reheat especially well, some even improve in flavor if they are made in advance. Care must be taken to avoid additional cooking; rare meat should never be heated beyond its original doneness temperature, or it will cook to medium or well done.

To retain moisture during reheating, cover food with a lid. Exceptions are rare or medium meats, some sandwiches, griddle foods like pancakes, and baked foods. Wrap breads and sandwiches in paper napkins to absorb moisture and prevent sogginess.

Follow the directions for recommended foods and weight that can be cooked on each category. There are 5 categories for reheating. Press REHEAT once for each category or minute; twice for category 2 or 2 minutes, etc., up to 5. Use only microwaveable containers.

Reheating Chart (touch REHEAT once for each category or minute.)

Category & Item	Amount	Starting Temp.	Suggested Serving Temp.	Special Techniques
1 Breads	3 pieces	Refrigerated.		Wrap in paper napkin or towel.
2 Meat Slices beef, ham, pork, turkey.	1 to 2 servings (340g, 12 oz.)	Refrigerated.	66 to 71°C (150 to 160°F)	Cover with wax paper. Do not cover rare or medium rare meats.
3 Soups	1 serving (284g, 10 oz.)	Refrigerated.	60 to 77°C (140 to 170°F)	Cover, stir after half the time.
4 Plate Meals meat plus vegetable & potato.	1 plate	Refrigerated.	66 to 71°C (150 to 160°F)	Cover plate with wax paper or plastic wrap.
5 Casseroles	2 to 3 servings (454g, 16 oz.)	Refrigerated.	60 to 77°C (140 to 170°F)	Cover, stir after half the time.

AUTO WEIGHT DEFROSTING

Defrosting frozen food is one of the benefits of a microwave oven. Microwave defrosting is much faster than refrigerator defrosting and safer than room temperature defrosting, since it does not promote the growth of harmful bacteria. To obtain the best results, follow special techniques for defrosting. Remember when defrosting to allow for a standing time to evenly thaw food. Unwrap food, place in dish, or arrange properly on dish so microwaves can reach all sides. Halfway through defrosting time, stir, turn over or redistribute food. Breaking up the pieces of chicken, fish and meat when they are partially thawed will help. Any pieces which are already thawed should be removed.

Preparing Food For Freezing

For best results, select good quality food and freeze immediately. Food should be wrapped as airtight as possible before freezing.

Wrapping materials best suited for use in the freezer are odorless, and moisture and vapor proof. Heavy-duty plastic wraps and bags, and freezer wrap are suitable.

When wrapping for freezing, arrange meat, poultry, fish and seafood in thin uniform layers. Package minced meat in 2.5 to 5-cm (1 to 2-inch) thick rectangular, square or round shapes. Chicken pieces, chops, stew meat and fish fillets will defrost more easily if frozen in 1 or 2 piece layers rather than in bulky, thick packages. To aid in separating chops, hamburger patties and fish fillets during defrosting, place two pieces of wax paper between the layers.

Remove giblets from fresh whole poultry. (The giblets may be frozen separately, if desired). Clean and dry poultry. Tie legs and wings with string; this helps poultry keep its shape during freezing. Remove excess air from package. Label with contents, date and weight.

MEATS

Roasts, chops, hamburgers and small cuts of tender meat cook beautifully in the microwave oven. Most roasts can be cooked rare, medium or even well-done in less than one hour. Less tender cuts of meat, such as pot roast, can be simmered fork tender in a sauce or gravy. Tough cuts that require long slow cooking will do better in a conventional range or oven.

A large piece of meat, especially if its shape is uneven, should be turned over occasionally for uniform roasting.

Meat	Power Level	Cooking Time (per lb./500g)	Standing Time	Special Notes
Beef Roast				
Rare	80%	8-10 min.	5-7 min.	Turn over after half the time.
Medium	80%	10-13 min.	10-15 min.	
Well	80%	13-16 min.	10-15 min.	
Pork Roast				
Bone-in	80%	16-20 min.	10 min.	Cover with plastic wrap.
Boneless	80%	21-24 min.	10-15 min.	Turn over after half the time.
Lamb Roast				
Bone-in Medium	80%	9-12 min.	10-12 min.	Turn over after half the time.
Well	80%	12-15 min.	10-15 min.	
Boneless Medium	80%	12-14 min.	10-12 min.	
Well	80%	14-18 min.	10-15 min.	
Beef Patties (3½ oz. (100g) ea.)				
2 patties	100%	3½-4 min.	5-7 min.	Turn over and rearrange after half the time.
4 patties	100%	5-6 min.	5-7 min.	
Meatloaf (2 lb. (90.7g))	100%	19-22 min.	10-12 min.	Cover with wax paper.
Bacon				
Slices (4 strips)	100%	5-6 min.	—	Cover with paper towels top and bottom.
(1 slice; weight: 3.2g; length: 28cm)				
Ham				
Slices (2.5-cm (1-inch) thick)		10-11 min.	5-7 min.	Cover with plastic wrap
4 slices	100%			

POUTRY

Chicken is one of the most popular foods and microwaving chicken is one of the best uses of your microwave oven. Chicken stays juicy and tender in the microwave oven. However, juiciness prevents browning because chicken crisps and browns only when the skin dries out enough to change color. Standing time is important, because it allows the interior to finish cooking without toughening the delicate breast meat.

Food	Power Level	Cooking Time (per lb./500g)	Standing Time	Special Notes
Chicken whole	100%	8-10 min.	10-15 min.	Place breast-side up on roasting rack. let stand, covered, before serving.
Chicken cut up	100%	8-9 min.	7-10 min.	
Turkey	80%	8½-10 min.	10-15 min.	
Cornish Hens	100%	9-10 min.	7-10 min.	
Turkey Breast	60%	12-14 min.	5-7 min.	Rearrange once during cooking. Cover with wax paper.

SEAFOOD

Microwaving is one of the easiest and most effective ways of preparing fish and seafood, which stay delicate and tender with quick, moist cooking. Overcooking dries out and toughens seafood, so you should check it after the minimum time. If thick pieces like fish steaks or lobster tails are done on the outside but still slightly translucent in the middle, let them stand for a few minutes; internal heat will complete the cooking.

Food	Power Level	Cooking Time (per lb./500g)	Standing Time	Special Notes
Whole Fish (1 lb. to 1½ lbs.) (454g to 681 g)	100%	8-9 min.	5 min.	Turn over after half the time.
Fish Fillet (1 lb. (454g))	100%	8-9 min.	4-5 min.	Turn over after half the time.
Fish Steak 1-inch (2.5-cm) thick (1 lb. (454g))	100%	5-6 min.	5-6 min.	Turn over after half the time. Cover with wax paper.
Shrimp (1 lb. (454g))	100%	4-5 min.	5 min.	Rearrange once Cover with plastic wrap.
Sea Scallops (1 lb. (454g))	80%	8-9 min.	5 min.	Rearrange once. Cover with plastic wrap.

VEGETABLES

Guide for Cooking Fresh Vegetables

Nutrition research indicates that many microwaved vegetables and fruits lose less water soluble vitamin C than when cooked conventionally. This is due to shorter cooking time and to the fact that less cooking water is needed when microwaving fruits and vegetables. Best of all, vegetables keep their fresh color, texture and flavor. Vegetables should be microwaved covered with vented plastic wrap or a casserole lid. Vegetables cooked in their skins, such as potatoes, are already so tightly covered that they should be pricked with a fork before cooking in order to release excess steam. To assure even cooking, vegetables should be cut in uniform pieces and stirred during the cooking time. Always add salt to water before adding vegetables. Reduce time a minute or two for crisp-tender; increase time for very soft texture. Remember to allow standing time of 2 to 5 minutes after cooking, because as most foods do, vegetables will continue to cook after they are removed from microwave oven.

Food	Water Amount	Cook at full power	Standing Time	Special Notes
Asparagus				
Spears (1 lb. (454g))	¼ cup	6½-8 min.	2 min.	Medium Casserole. Rearrange once.
Cuts (1 lb. (454g))	½ cup	6½-8 min.	2 min.	Medium Casserole. Rearrange once.
Beans				
Fresh green (½ lb. (227g))	¼ cup	5-6 min.	2 min.	Stir twice.
Frozen green (½ lb. (227g))	2 Tbsp.	7-9 min.	2 min.	Stir twice.
Green Peas (2 cups)	¼ cup	5-6 min.	2 min.	Small casserole. Stir twice.
Broccoli (2 cups)	¼ cup	5-6 min.	2 min.	Medium casserole. Rearrange once.
Brussels Sprouts (1 lb. (454g))	¼ cup	8-10 min.	2-3 min.	Medium casserole. Stir once.
Cabbage (1 lb. (454g))	¼ cup	7-8 min.	2-5 min.	Rearrange once.
Cauliflower pieces (1 head)	¼ cup	8-9 min.	2-5 min.	Wrap in plastic wrap. Stir once.
Mushroom slices (½ lb. (227g))	2 Tbsp. or 2 Tbsp. butter	4-5 min.	2-3 min.	Small casserole. Stir once.

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